

**11.** An apparatus according to claim **10** wherein the computer program code, when executed by the at least one processor, is configured to cause the apparatus to permit the audio playback system to be calibrated by causing the angle to be provided to a remote audio processor of the audio playback system to calibrate audio.

**12.** An apparatus according to claim **10** wherein the computer program code, when executed by the at least one processor, is configured to cause the apparatus to permit the audio playback system to be calibrated by determining a measure of calibration and causing the measure of calibration to be provided to a remote audio processor of the audio playback system.

**13.** An apparatus according to claim **12** wherein the computer program code, when executed by the at least one processor, is configured to cause the apparatus to determine a measure of calibration by determining a modified azimuth of an auditory object based upon the angle of the display.

**14.** An apparatus according to claim **12** wherein the computer program code, when executed by the at least one processor, is configured to cause the apparatus to determine a measure of calibration by converting left and right channels of multichannel audio into mid and side channels, modifying the mid and side channels based upon a target audio image width and converting the mid and side channels, as modified, to left and right channels of multichannel audio.

**15.** An apparatus according to claim **10** wherein the computer program code, when executed by the at least one processor, is configured to cause the apparatus to receive the image by causing the image to be captured by a camera of a mobile device at the first location from which the display will be viewed.

**16.** A computer program product comprising at least one non-transitory computer-readable storage medium having computer-executable program code portions stored therein, the computer-executable program code portions comprising program code instructions for:

receiving an image comprising a display from a first location;

determining a dimension of the display within the image; determining an angle of the display based upon the dimension of the display determined within the image and the first location; and

permitting an audio playback system associated with the display to be calibrated based upon the determined angle.

**17.** A computer program product according to claim **16** wherein the program code instructions for permitting the audio playback system to be calibrated comprise program code instructions for causing the angle to be provided to a remote audio processor of the audio playback system to calibrate audio.

**18.** A computer program product according to claim **16** wherein the program code instructions for permitting the audio playback system to be calibrated comprise program code instructions for determining a measure of calibration and program code instructions for causing the measure of calibration to be provided to a remote audio processor of the audio playback system.

**19.** A computer program product according to claim **18** wherein the program code instructions for determining a measure of calibration comprise program code instructions for determining a modified azimuth of an auditory object based upon the angle of the display.

**20.** A computer program product according to claim **18** wherein the program code instructions for determining a measure of calibration comprise program code instructions for converting left and right channels of multichannel audio into mid and side channels, program code instructions for modifying the mid and side channels based upon a target audio image width and program code instructions for converting the mid and side channels, as modified, to left and right channels of multichannel audio.

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